

## ABSTRACT OF DISCLOSURE

An automated peritoneal dialysis system for performing continuous peritoneal dialysis is disclosed which includes a fluid circuit for delivering unsterilized dialysate from an uninterrupted supply, and a dialysate sterilization component having at least one in-line sterilization filter assembly disposed in the inflow line segment for realtime sterilization of the unsterilized dialysate during flow prior to patient delivery. A filter test component is operatively associated with the sterilization filter assembly for conducting a realtime integrity test on the filter assembly to test for a filter failure which would allow contaminants into the dialysate prior to patient delivery. If the filter fails the test, the fluid is discarded. In this manner, sterilization of fluid in realtime during a peritoneal dialysis process provides a high rate of dialysate exchange during repeated dialysate fill and drain cycles.

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